

## A Revision of Four Genera of Australian Scelionidae.

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This paper revises the Australian species of the genera *Hoploteleia* Ashmead, *Anteromorpha* Dodd, *Styloteleia* Kieffer, and *Phænoteleia* Kieffer of the family Scelionidae (Hymenoptera Proctotrypoidea); three species of *Hoploteleia* and one species of *Phænoteleia* are described as new.

The genus *Hoploteleia* occurs throughout the world; *Styloteleia* and *Phænoteleia* were not formerly recognised outside the Philippine Islands; *Anteromorpha* is common to Australia and the Hawaiian Islands.

Except in the case of the species of *Hoploteleia*, which are parasitic in the eggs of long-horned grasshoppers (*Tettigoniidae*), the host relations of these insects are unknown.

### STYLOTELEIA KIEFFER.

Broteria, vol. 14, p. 184 (1916).

*Female; Male*.—Head, from dorsal aspect, transverse, about twice as wide as long, descending sharply to the occipital margin which is almost straight; from frontal aspect circular; lower frons faintly depressed and with a median carina; cheeks broad; mandibles tridentate; maxillary palpi 4-jointed; eyes large, bare; lateral ocelli against the eye margins. Antennæ 12-jointed; in the female with a stout 5-jointed club; in the male the flagellum filiform, the joints moderately long. Thorax, from lateral aspect, plainly longer than high, almost flat dorsally; pronotum hardly visible from above; scutum large, the anterior margin rather broadly rounded, the median lobe anteriorly with a small area separated posteriorly by a delicate transverse carina; parapsidal furrows complete and distinct; scutellum twice as wide as long, its posterior margin truncate or somewhat concave; metanotum in the male very transverse, not armed or prominent, its posterior margin straight; propodeum in the male moderately short, its posterior margin gently concave, without median or lateral carinae, armed medially with a pair of well-separated stout teeth, the posterior angles faintly acute; metanotum and propodeum in the female broadly flattened or depressed, and hidden by the abdominal prominence, the propodeum on either side and wide apart with a delicate carina which may be raised at base in the form of a short tooth. Forewings long and broad, reaching the

apex of the abdomen in the male, or failing by a little in the female; submarginal vein with a downward curve before joining the costa; marginal vein one-half to two-thirds as long as the stigmal, which is long and very oblique; postmarginal vein one-half longer or twice as long as the stigmal; basal and median veins indicated by brown lines. Legs slender; posterior tarsi no longer than their tibiæ, their basal joint longer than 2.5 combined. Abdomen slender, somewhat narrowed at base; in the female one and two-thirds to twice as long as the head and thorax united, elongate, fusiform, narrowly acuminate at apex; segment 1 not petiolate or subpetiolate, armed with a large stout horn that projects over the propodeum and metanotum or even over the posterior portion of the scutellum; 2 and 3 a little longer than 1 or 4; 6 as long as or longer than 4 and 5 united, transversely impressed or subdivided toward the middle and having the appearance of two segments, so that the abdomen appears to contain seven segments; in the male the abdomen is one-half to two-thirds longer than the head and thorax united, consisting of eight segments, 6 somewhat shorter than 5, the apical two segments very short and transverse.

*Type*.—*S. rufescens* Kieffer, *Broteria*, vol. 14, p. 185 (1916).

This genus was erected for the above species from the Philippine Islands. Through the courtesy of the late C. F. Baker, of Los Banos, Philippine Islands, I have had the opportunity of examining a paratype of *rufescens*, and am thus able to include three Australian species in the genus.

*Styloteleia* contains long slender insects with the general appearance of species of *Macroteleia* Westwood and elongate forms of *Baryconus* Foerster, from both of which genera it may be distinguished by the downward curve of the submarginal vein, and in the female by the apparent division of the apical abdominal segment. The abdomen is less narrowed at base than in *Baryconus*, and is not subpetiolate. The strong teeth on the propodeum are much larger than in certain species of *Baryconus*, where they are merely basal elevations of the median carinæ. The three Australian species are very similar.

#### STYLOTELEIA ACUTIVENTRIS DODD.

*Trichoteleia acutiventris* Dodd, *Royal Soc. of Qld.*, vol. 26, p. 98 (1914).  
*Trichoteleia novæ-hollandiæ* Dodd, *Archiv für Naturgeschichte*, Berlin, vol. 80 (1915).

*Female*.—Length, 3.20 mm.

Head black; thorax rich orange red, darker on the sides, the median lobe of the scutum mostly black; abdomen deep red, the apical segment blackish, the basal horn bright orange; legs bright golden yellow, the coxæ dusky; antennal scape and pedicel golden yellow, the funicle joints brownish yellow, the club black.

Vertex and upper frons with a few scattered fine punctures bearing fine hairs; a line of similar punctures on either side of frons against the eyes; cheeks with strong striæ converging towards mouth, smooth above

except for a few punctures; vertex between the eyes rather wide, the lateral ocelli plainly farther from each other than from the median ocellus. Antennal scape moderately long; pedicel twice as long as its greatest width; funicle joints as wide as the pedicel; 1 slightly longer than the pedicel, 2 distinctly shorter than 1, 3-5 gradually shortening, 5 as wide as long; club 5-jointed, 1-4 each twice as wide as long, 3 slightly the widest. Thorax from dorsal aspect one-third longer than its greatest width; scutum stout, smooth, with a few rather small scattered punctures bearing fine hairs; parapsidal furrows coriaceous, wide apart, separated posteriorly by about two-thirds their length; scutellum with fine pubescence and a few punctures, its posterior margin gently concave; propodeum at base on either side of the abdominal horn with a stout upright tooth. Forewings failing by a little to reach apex of abdomen; somewhat brownish, the infuscation tending to form a longitudinal stripe; marginal vein two-thirds as long as the long oblique stigmal vein, the postmarginal twice as long as the stigmal; basal and median veins represented by thick brown lines. Abdomen twice as long as the head and thorax united, four times as long as its greatest width; segment 1 somewhat narrowed at base, almost as long as its posterior width, with a large stout horn projecting over the propodeum; 2 one-fourth longer than 1; 3 as long as 2, no longer than wide; 4 two-thirds as long as 3; 5 two-thirds as long as 4; 6 somewhat longer than 4 and 5 combined, the basal portion one-half as long as the narrow apical portion; 1 strongly striate, its horn smooth; 2 strongly striate, the striæ irregular except laterally, the surface between densely rugulose; 3 densely reticulate-rugulose, with several striæ laterally; 4 with similar sculpture but rather broadly smooth on posterior half medially; 5 and basal portion of 6 with a smooth median path, on either side with numerous pubescent punctures and fine surface sculpture; apical portion of 6 with fine striæ and pubescence; lateral margins of segments with fine pale hairs.

*Male*.—Length, 2.70 mm.

Scutum anteriorly with a few more punctures than in the female; posterior margin of scutellum straight; teeth of propodeum triangular, their inner margins oblique and almost meeting at base, their outer margins straight, their surface with two strong striæ. Abdomen two-thirds longer than the head and thorax united; sculpture failing medially on segments 4 and 5 and posterior half of 3; 6 with similar sculpture to 5; 7 and 8 very short. Antennal scape yellow, the pedicel dusky, the flagellum black; pedicel one-third longer than its greatest width; funicle 1 twice as long as wide, subequal to 5; 3 slightly the longest, 4-9 gradually shortening.

*Habitat*.—North Queensland: Cairns district (type), one female, two males in August and September (A.P.D.); Dunk Island, one male in August, H. Hacker.

*Type*.—South Australian Museum, I. 11012.

The male was originally described as a distinct species.

*STYLOTELEIA NIGRICINCTA* DODD.

*Trichoteleia nigricincta* Dodd, Archiv fur Naturgeschichte, Berlin, vol. 80, (1915).

*Female*.—Length, 2.40 mm.

Head black; thorax rich orange-red, the median lobe of the scutum dusky; abdomen dull orange, dusky-black at base, apex, and along lateral margins, the basal horn bright orange; legs, including the coxæ, golden-yellow; antennæ golden-yellow, the club black.

Vertex between the eyes not as wide as in *acutiventris*, the lateral ocelli as far from the median ocellus as from each other; vertex from the median ocellus to the occiput with numerous rather small punctures bearing fine setæ; frons smooth, the upper frons with a few scattered punctures, and a line of punctures against the eye margins; cheeks striate and with numerous punctures, the upper cheeks showing impressed reticulation. Pedicel twice as long as its greatest width; funicle joints narrower than the pedicel, 1 as long as the pedicel, 2 shorter than 1 but twice as long as wide, 3 slightly shorter than 2, 4 plainly shorter than 3, 5 as wide as long; club 5-jointed, 1-4 each twice as wide as long, 1 rather small, 3 slightly the widest. Thorax one-half longer than its greatest width; median lobe of scutum with numerous small punctures, the lateral lobes with scattered punctures; parapsidal furrows separated posteriorly by one-half their length; scutellum with a few fine punctures, its posterior margin almost straight; propodeum at base on either side of the abdominal horn with a short blunt tooth. Forewings distinctly brownish; marginal vein hardly one-half as long as the long stigmal vein, the postmarginal two-thirds longer than the stigmal; basal and median veins represented by thick brown lines. Abdomen a little less than twice as long as the head and thorax united, four times as long as its greatest width; segment 1 as long as its posterior width, with a large stout horn projecting over the propodeum; 2 scarcely longer than 1; 3 as long as 2, three-fourths as long as wide; 4 two-thirds as long as 3; 5 two-thirds as long as 4; 6 somewhat longer than 4 and 5 united, the basal portion one-half as long as the narrow apical portion; 1 striate, its horn circularly striate at base, smooth for the most part; 2 rather finely irregularly striate and densely finely reticulate; 3 and 4 with the striæ less distinct and giving way to the reticulate sculpture, which is inclined to fail medially on 4; 5 and basal portion of 6 with a smooth median path, on either side weakly reticulate with a few punctures; apical portion of 6 with fine striæ and pubescence.

*Male*.—Unknown.

*Habitat*.—North Queensland: Cairns district, the type female in February, A. P. Dodd.

*Type*.—South Australian Museum, I. 11109.

Very similar to *acutiventris*, but smaller, the vertex narrower between the eyes and with more numerous punctures, the funicle joints



more slender than the pedicel, the posterior margin of the scutellum not definitely concave, the striæ less strong on segments 1 and 2 of abdomen, and the marginal vein shorter in relation to the stigmal vein.

*STYLOTELEIA TERRÆ-REGINÆ* DODD.

*Trichoteleia terræ-reginæ* Dodd, Archiv für Naturgeschichte, Berlin, vol. 80, (1915).

*Female*.—Length, 3.10 mm.

Black, the sides of the thorax and the abdomen somewhat brownish; legs golden-yellow, the coxæ somewhat darker; antennal scape golden-yellow, the pedicel and funicle joints brownish-yellow, the club black.

Vertex between the eyes rather broad, the lateral ocelli nearer to the median ocellus than to each other; upper frons and vertex between the ocelli smooth with a very few scattered punctures; behind the ocelli to the occiput the punctures are rather dense; lower frons smooth, with a row of punctures against the eyes; cheeks with scattered punctures; lower cheeks and frons against the mouth with converging striæ. Pedicel twice as long as its greatest width; funicle joints scarcely narrower than the pedicel; 1 a little longer than the pedicel, 2-5 gradually shortening, 5 as wide as long; club stout, compact, 5-jointed, 1-4 each fully twice as wide as long. Thorax one-half longer than its greatest width; scutum with scattered punctures on the median lobe, the lateral lobes smooth; parapsidal furrows punctate, separated posteriorly by less than one-half their length; scutellum with a few punctures, its posterior margin definitely concave; carinæ on either side of propodeum not raised at base in the form of teeth. Forewings very lightly stained; marginal vein two-thirds as long as the long stigmal, the postmarginal one-half longer than the stigmal; basal and median veins marked by thick light brown lines. Abdomen twice as long as the head and thorax united, about five times as long as its greatest width; segment 1 fully as long as its posterior width, with a large stout horn projecting over the propodeum; 2 somewhat longer than 1; 3 as long as 2, as long as wide; 4 a little shorter than 3; 5 two-thirds as long as 4; 6 no longer than 4 and 5 united, the basal portion one-half as long as the apical portion; 1 strongly striate, its horn smooth but circularly striate at base; 2 and 3 rather strongly striate, rugulose between the striæ; 4 and 5 with similar sculpture but the striæ are weaker and the median line is almost smooth; basal portion of 6 smooth at the median line, on either side with dense punctures, the apical portion with fine striæ and pubescence.

*Male*.—Length, 2.45 mm.

Scutum and scutellum with the fine pubescent punctures rather more numerous than in the female; posterior margin of scutellum straight; propodeum longitudinally foveate medially, the teeth stout and blunt. Abdomen two-thirds longer than the head and thorax united; segments 4 and 5 not smooth at the median line; 4 with scattered punctures posteriorly; 5 with scattered punctures between the striæ;

6 shorter than 5, rather densely punctate and pubescent; 7 and 8 very short. Antennal scape and pedicel yellow, the basal flagellar joints suffused with yellow; funicle 3 slightly the longest, 1 twice as long as wide, 9 hardly shorter than 1.

*Habitat*.—North Queensland: Cairns district, two females, one male in February and September, A. P. Dodd.

*Type*.—South Australian Museum, I. 11154.

Distinguished from *acutiventris* and *nigricincta* by its colour, absence of teeth on the female propodeum, and the stronger striation of the abdomen, and from *nigricincta* by the concave posterior margin of the scutellum, width of the vertex between the eyes, and sparser punctuation between the ocelli.

### PHÆNOTELEIA KIEFFER.

Broteria, vol. 14, p. 62 (1916).

This peculiar genus was erected to contain one species, *P. rufa* Kieffer, from the Philippine Islands. The discovery of a congeneric species from North Queensland is, therefore, of considerable interest. This insect has the general habitus of *Baryconus* Foerster, but the basal abdominal horn or process is greatly lengthened, extending for some distance into the mesoscutum and fitting into a deep margined channel, which cuts through the propodeum, metanotum, and scutellum, so that these sclerites are visible only laterally; when viewed from the side the outline of this process is continuous with the thorax. The submarginal vein has the downward bend, characteristic of *Styloteleia* Kieffer and *Anteromorpha* Dodd. The carinæ on the propodeum appear to be the true lateral carinæ. The second abdominal segment is distinctly longer than the third and from lateral aspect is constricted at its base. The male of this genus is not yet known.

### PHÆNOTELEIA CANALIS NEW SPECIES.

*Female*.—Length, 3.70 mm.

Bright red-brown, the eyes and ocelli black, the abdomen dusky at apex; coxæ, trochanters, and femora bright yellow, the posterior coxæ and anterior femora brownish at base, the tibiæ and tarsi dusky-yellow; antennæ golden yellow, the club black.

Head from dorsal aspect less than twice as wide as long, the vertex posteriorly descending sharply to the occipital margin; from frontal aspect the head is circular; frons not depressed above the antennal insertion; cheeks broad; mandibles tridentate; eyes large, bare; ocelli large, close together, the lateral pair separated by their own diameter from the median ocellus and by less than one-half their own diameter from the eyes; head with fine pubescence, densely rather strongly reticulate-punctate and finely coriaceous, the sculpture with a transverse arrangement on lower half of frons; lower cheeks and the frons against

the mouth with converging striæ. Antennal scape moderately long and slender, its articulate joint long and slender; pedicel almost twice as long as its greatest width; funicle joints as wide as the pedicel, 1 almost twice as long as the pedicel, 2 two-thirds as long as 1, 2-5 gradually shortening, 5 as long as wide; club rather slender, 5-jointed, joints 1-4 about subequal, each slightly wider than long. Thorax from dorsal aspect one-half longer than its greatest width; from lateral aspect about twice as long as high, flat above; pronotum narrowly visible on the sides; scutum almost as long as wide, broadly rounded anteriorly, strongly reticulate-punctate and with fine pubescence; parapsidal furrows absent; scutellum present on either side of median channel, its posterior margin straight, its surface coriaceous and with a few punctures; metanotum present on either side as a small transverse concave plate; propodeum long, on either side with a lateral carina running from its base somewhat obliquely inwardly to join the margin of the median channel before the posterior margin. Posterior femora distinctly swollen. Forewings long but not reaching apex of abdomen; moderately broad; ciliation normal; lightly stained brownish; submarginal vein joining the costa at slightly more than one-half the wing length, rather close to the costa except in its apical third where there is a distinct downward curve; marginal vein short, one-fourth as long as the stigmal which is long and oblique, the postmarginal twice as long as the stigmal; basal and median veins indicated by light brown lines. Abdomen, without its basal horn, one-half longer than the head and thorax united, four times as long as its greatest width; a little narrowed at base, narrowing to apex; segment 1 twice as wide as long, produced anteriorly to merge with its process, which is very long, reaching almost to the middle of the scutum, slender, from lateral aspect not raised but continuing the direction of the segment, separated posteriorly from the segment by an oblique carina on either side, these carinæ meeting sharply at the median line; 2 one-third longer than its greatest width, sharply impressed or constricted at base; 3 three-fifths as long as 2; 4 a little shorter than 3; 5 as long as 4; 6 slightly shorter than 5, conical, almost twice as long as its basal width; abdomen bluntly rigid medially; segment 1 with two or three striæ on either side, transversely rugose at base, smooth posteriorly, the horn finely transversely striate but coarsely transversely rugose posteriorly; 2-4 longitudinally striate, finely sculptured between the striæ which are absent medially on 3, 4, and posterior third of 2, where the surface bears fine impressed reticulation; 5 and 6 with scattered pubescent punctures and fine striæ which fail medially on 5.

*Male*.—Unknown.

*Habitat*.—North Queensland: Dunk Island, one female in August. H. Hacker.

*Holotype*.—In the Queensland Museum.

*ANTEROMORPHA* DODD.

Royal Soc. of S. Australia, vol. 37, p. 145 (1913).

*Female; Male*.—Head from dorsal aspect twice as wide as long; occipital margin concave, the frontal outline gently convex from eye to eye; from lateral aspect the frons and vertex are gently convex, the vertex posteriorly shortly declivous to the occipital margin; frons broad, hardly impressed above the antennal insertion; cheeks broad; eyes moderately large, wide apart, lightly pubescent; ocelli wide apart, the lateral pair touching the eye margins; mandibles large, bidentate, the teeth long and acute; maxillary palpi 4-jointed. Antennæ 12-jointed in both sexes; in the female the funicle joints short, the club 6-jointed; in the male the flagellar joints submoniliform. Thorax from lateral aspect much longer than high, almost flat above; from dorsal aspect one-half longer than its greatest width; pronotum narrowly visible laterally; scutum stout, its anterior margin broadly rounded, somewhat declivous anteriorly; parapsidal furrows absent; scutellum rather large, its posterior margin faintly convex; metanotum triangular, bluntly pointed at apex, about as long as its basal width, somewhat shorter than the scutellum, projecting as a flat tooth over the propodeum as far as or a little beyond its posterior margin; propodeum rather short, without lateral carinæ, medially with a pair of well-separated carinæ which curve sharply to form the almost straight posterior margin, the posterior angles in the form of short teeth; mesopleura with a large impression; metapleura with a cross-furrow at half their length. Legs slender; posterior tarsi a little longer than their tibiæ, their basal joint hardly as long as 2-5 united. Forewings extending to apex of abdomen; moderately broad; marginal cilia moderately short, discal cilia fine and dense; submarginal vein in its distal third curving away from before joining the costa; marginal vein shorter than the stigmal, which is long and very oblique, the postmarginal somewhat longer than the stigmal; basal and median veins hardly marked. Abdomen a little longer than the head and thorax united, twice as long as its greatest width, a little narrowed at base, blunt at apex; segment 1 sub-sessile, transverse, without a prominence in the female; 2 plainly longer than 1; 3 much the longest, somewhat longer than 1 and 2 or 4-6 united.

*Type*.—*A. australica* Dodd.

Among the Australian genera, in *Lapitha* Ashmead the abdomen is more petiolate, and segments 2 and 3 are almost subequal; in *Opisthacantha* Ashmead the spine on the metanotum is simple, the abdomen is more petiolate, and the parapsidal furrows are complete; in *Chromoteleia* Ashmead the parapsidal furrows are complete, and segments 2 and 3 of the abdomen are subequal. I have been unable to reconcile *Anteromorpha* with any of the genera given by Kieffer (1926); its distinguishing characters may be found in the absence of parapsidal furrows, form of the metanotum, subsessile abdomen with its long third segment, downward curving submarginal vein, and very oblique stigmal vein.



The Hawaiian species, *Opisthacantha dubiosa* Perkins (Fauna Hawaiiensis, vol. 2, p. 623, 1910) will fall in this genus. I have seen an imperfect specimen, which is strikingly similar to *A. australica*, and may prove to be identical.

*ANTEROMORPHA AUSTRALICA* Dodd.

Royal Soc. of S. Australia, vol. 37, p. 146 (1913).

*A. assimilis* Dodd, ibidem, p. 146.

*Female*.—Length, 1.50–1.80 mm.

Head and thorax black; abdomen dull brown to brownish-black; legs golden-yellow, the coxæ sometimes brown; antennal scape yellow, dusky at apex, the funicle joints fuscous, the club black.

Head with a dense fine pale pubescence; vertex and upper two-thirds of frons with a dense fine reticulation which has a longitudinal tendency on the frons; against the occiput fine indistinct longitudinal striæ are present; lower third of face finely transversely striate above the antennal insertion, longitudinally striate on either side; cheeks striate below, reticulate above. Antennal scape moderately long, its articulate joint long; pedicel one-half longer than its greatest width; funicle joints as wide as the pedicel, 1 almost as long as the pedicel, one-third longer than wide, 2 quadrate, 3 and 4 small and transverse; club 6-jointed, joint 1 small and transverse, 2-5 each twice as wide as long. Scutum and scutellum finely densely pubescent and closely shallowly reticulate-punctate, the sculpture of the scutellum finer than that of the scutum; metanotum rugose. Forewing lightly or distinctly brownish; marginal vein one-third to two-thirds as long as the stigmal, the postmarginal hardly one-half longer than the stigmal. Segments 1 and 2 of abdomen strongly striate; 3 finely, somewhat irregularly, striate, finely sculptured between the striæ which are inclined to fail medially; lateral margins of abdomen pubescent; segments 2 and 3 each with a row of hairs posteriorly, 3 with a few hairs dorsally; 4-6 with numerous hairs and minute punctures.

*Male*.—Antennæ black, the scape yellow except at apex; pedicel slightly longer than its greatest width; funicle 1 distinctly longer than the pedicel, twice as long as wide; 3 a little shorter than 1; 2 plainly shorter than 1, a little shorter than 3; 4-9 subequal, moniliform, each a little longer than wide.

*Habitat*.—Queensland: Cooktown, Cairns, Pentland, Rockhampton, Brisbane, Toowoomba, and Chinchilla. New South Wales: Moonie River. A small series.

*Type*.—South Australian Museum, I. 1383.

*A. assimilis* Dodd is a true synonym, the wing characters being slightly variable.

A single female, labelled "Queensland, A. A. Girault," has the thorax yellowish brown, and probably represents a distinct species.

*HOPLOTELEIA* ASHMEAD.

Bull U.S. Nat. Museum, vol. 45, p. 227 (1893)..

A world-wide genus containing 30-40 described species, the type, *H. floridana* Ashmead, from North America. Ashmead recognised the genus by the "three impressed lines on the mesonotum," and this character has since been generally accepted. However, in most of the Australian species, the median groove of the mesoscutum is not defined, or it may be replaced by a median carina, as in *H. orthoptera* Dodd from West Africa, *H. serena* Dodd (*Camptoteleia carinata* Kieffer) from the Philippine Islands, and the species herein described as *H. elevata* Dodd.

The Australian species are very similar in size, colour, and sculpture, and their separation has not been readily accomplished. No reliable specific differences could be found in the wings or antennæ. The characters used to distinguish the species are mostly small, but appear to be valid. The colour of the legs and antennæ seems constant, although as a general rule I do not attach great importance to the colour of the appendages in the *Scelionidæ*.

The nine species recognised in this paper are from Eastern Australia, mostly from coastal or subcoastal districts; *H. amica*, and to a lesser degree *H. fæderata*, may be inland forms.

*Hoploteleia grandis* Dodd (Royal Soc. of S. Australia, vol. 37, p. 176, 1913) is not a member of this genus.

KEY TO THE AUSTRALIAN SPECIES OF *HOPLOTELEIA* ASHMEAD.

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|--------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| 1. Mesoscutum with a median carina; occipital margin not uniformly concave .. .. .                                                         | <i>elevata</i> new species. |
| Mesoscutum without a median carina; occipital margin uniformly concave .. .. .                                                             | 2.                          |
| 2. Metanotum with one small tooth; femora black; mesoscutum with a distinct median groove; hind tarsi much longer than their tibiæ .. .. . | <i>atricornis</i> Dodd.     |
| Metanotum bidentate; femora red .. .. .                                                                                                    | 3.                          |
| 3. Hind tarsi much longer than their tibiæ; median groove of scutum rather well marked .. .. .                                             | <i>persimilis</i> Dodd.     |
| Hind tarsi not much longer than their tibiæ; median groove of scutum not defined .. .. .                                                   | 4.                          |
| 4. Females .. .. .                                                                                                                         | 5.                          |
| Males .. .. .                                                                                                                              | 10.                         |
| 5. Apical abdominal segment with a spine on either side ..                                                                                 | 6.                          |
| Apical segment without spines or teeth .. .. .                                                                                             | 8.                          |
| 6. Antennæ almost wholly black; apical spines of abdomen long .. .. .                                                                      | <i>australica</i> Dodd.     |
| Funicle joints bright red; apical teeth short .. .. .                                                                                      | 7.                          |
| 7. Frontal impression sharply rounded above; coxæ red ..                                                                                   | <i>sculpturata</i> Dodd.    |
| Frontal impression broadly rounded above; coxæ black .. .. .                                                                               | <i>amica</i> new species.   |
| 8. Antennæ wholly black .. .. .                                                                                                            | <i>gracilicornis</i> Dodd.  |
| Scape and funicle joints red .. .. .                                                                                                       | 9.                          |

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|-----|-----------------------------------------------------------------------|---------|------------------------------|
| 9.  | Segments 3-5 of abdomen not definitely striate; cheeks largely smooth | .. .. . | <i>pulchricornis</i> Dodd.   |
|     | Segments 3-5 very definitely striate; cheeks densely sculptured       | .. .. . | <i>fæderata</i> new species. |
| 10. | Apical spines of abdomen long                                         | .. .. . | <i>australiana</i> Dodd.     |
|     | Apical spines short or absent                                         | .. .. . | 11.                          |
| 11. | Cheeks largely smooth; coxæ red                                       | .. .. . | <i>pulchricornis</i> Dodd.   |
|     | Cheeks densely sculptured                                             | .. .. . | 12.                          |
| 12. | Coxæ black; abdomen much narrower than the thorax                     |         | <i>amica</i> new species     |
|     | Coxæ red; abdomen not much narrower than the thorax                   |         | <i>fæderata</i> new species. |

### *HOPLOTELEIA AUSTRALICA* DODD.

Royal Soc. of S. Australia, vol. 37, p. 133 (1913).

*H. insularis* Dodd, *ibidem*, p. 134.

*Female*.—Length, 2.50-3.00 mm.

Black; tegulæ red; coxæ black, the legs bright reddish-yellow; antennæ black, the scape and funicle joints sometimes suffused with brown.

Head from dorsal aspect not more than twice as wide as long, slightly wider than the thorax; from lateral aspect the vertex flat, hardly sloping to the occipital margin; vertex coarsely longitudinally rugose-punctate; frons below the anterior ocellus shallowly reticulate-punctate; along the eye margins from just behind each lateral ocellus to the frontal depression there is fine close scaly reticulation; frontal depression strongly margined, large, longer than wide, sharply convex above, narrowly separated above from the eyes, smooth but showing obscure cross-striæ; frons on either side of depression shallowly reticulate-punctate; cheeks coarsely reticulate-punctate, the sculpture shallow toward the mouth; lateral ocelli a little separated from the eyes, distant from the frontal ocellus by less than  $1\frac{1}{2}$  times their own diameter; one or two irregular oblique striæ connect the frontal and lateral ocelli; head with a sparse pubescence of fine pale hairs. Antennal scape long and slender, the articulate joint very short; pedicel one-half longer than its greatest width; funicle 1 a little longer than the pedicel, twice as long as its greatest width, 2 shorter than 1, 3 a little longer than wide, 4 as wide as long; club slender, not well differentiated, joint 1 wider than long, much shorter than 2 which is longest and as long as wide, 3-5 each slightly wider than long. Thorax from dorsal aspect one-fourth longer than its greatest width; from lateral aspect one-third longer than high; pronotum narrowly visible on the sides, strongly rugose-punctate and with long white hairs; scutum three-fourths as long as its greatest width, its anterior margin strongly convex, its surface with scattered hairs; parapsidal furrows deep, punctate, at either end terminating in a large puncture; median lobe of scutum at the median line with confluent punctures which are shallow and indefinite anteriorly and do not form a groove, the rest of the surface and the parapsides faintly wrinkled and with dense fine impressed reticulation; between the posterior ends of the parapsidal furrows are two or three larger

punctures; parapsides with two or three large punctures along anterior margin and a punctate sulcus along lateral margin; scutellum strongly reticulate-punctate; metanotum coarsely foveate, the median process excavated medially and bounded by a straight raised carina, the posterior margin between the ends of these carinæ almost straight, the lateral margins oblique; propodeum short, its posterior margin uniformly gently concave, shallowly punctate and pubescent laterally, foveate medially, the lateral carinæ short and straight. Posterior tarsi not much longer (8:7) than their tibiæ. Forewings reaching apex of abdomen; subhyaline or lightly tinted; venation bright yellow; marginal vein short, not more than one-fourth as long as the stigmal, which is long and slightly oblique, the postmarginal three times as long as the stigmal. Abdomen as long as the head and thorax united,  $2\frac{1}{2}$  times as long as its greatest width; segment 1 two-thirds as long as its basal width; 2 one-third longer than 1; 3 one-third longer than 2, a little shorter than 4-6 united; 4 one-half as long as 3; 6 short, transverse, armed on either side with a sharp spine, the blunt apex showing just below; 1 with eight strong complete striæ, at base the surface between the striæ deeply pitted, posteriorly the surface finely sculptured and with a few fine short striæ; 2 rather strongly striate, the striæ somewhat irregular, finely sculptured between, laterally with obscure punctures between; 3 more finely and closely striate and with obscure shallow punctures between; punctuation more distinct on 4, the striæ faint; 5 for the most part with fine impressed reticulation, but indefinite punctures are present also; 6 densely punctate; lateral margins of abdomen and posterior margin of 2-4 with fine impressed reticulation; abdomen, except basal segment, with a conspicuous pubescence of fine white hairs which are longer laterally and on the apical segments.

*Male*.—Antennæ black, the scape and pedicel deep dusky-brown; pedicel small, no longer than its greatest width; flagellar joints filiform, 1 almost twice as long as its greatest width, 2 and 3 hardly shorter than 1, 4 plainly shorter than 3 and one-third longer than wide, 4-9 subequal. In structure and sculpture resembling the female.

*Habitat*.—North Queensland: Thursday Island, Cairns, Pentland; a series. This species is common in the Cairns district.

*Type*.—South Australian Museum, I. 1363.

*HOPLOTELEIA AUSTRALICA* VAR. *OCIDENTALIS* DODD.

Royal Soc. of Queensland, vol. 26, p. 96 (1914).

*Male*.—Length, 2.65 mm.

Differs from the typical form in the colour of the antennæ, the scape being bright golden-yellow, the pedicel and basal flagellar joints suffused with yellow.

*Female*.—Unknown.

*Habitat*.—North-West Queensland: Cloncurry, one male in April, A. P. Dodd.

*Type*.—In the South Australian Museum.



*HOPLOTELEIA ATRICORNIS* DODD.

*H. nigricornis* Dodd, Royal Soc. of S. Australia, vol. 37, p. 134 (1913);  
(preoccupied by *H. nigricornis* Cameron, 1912).

*H. atricornis* Dodd, Ent. Soc. of London, p. 341 (1919).

*Female*.—Length, 2.60 mm.

Black; tegulæ black; coxæ black, the femora piceous, the tibiæ and tarsi golden-yellow; antennæ wholly black.

Head from dorsal aspect less than twice as wide as long; vertex hardly sloping to the occipital margin; vertex behind the line of the lateral ocelli strongly longitudinally rugose-punctate; upper frons except medially and around the ocelli with fine dense impressed reticulation; there are about four striæ from the anterior ocellus to the frontal impression; frons on either side of the impression shallowly reticulate-punctate; cheeks with fine dense impressed reticulation. Antennæ as in *australica*. Thorax a little narrower than the head, one-third longer than its greatest width; pronotum distinctly visible on the sides, very strongly striate; scutum with fine dense impressed reticulation and faint wrinkles, the median lobe with a complete punctate median groove whose margins are carinate; a few weak punctures occur against the posterior margin of the median lobe; scutellum coarsely reticulate-punctate; metanotal plate small, forming an upright triangular tooth, not bidentate; propodeum as in *australica*, the posterior margin uniformly gently concave. Posterior tarsi one-half longer than their tibiæ. Forewings lightly stained; marginal vein one-fourth as long as the long stigmal vein, the postmarginal three times as long as the stigmal. Abdomen no longer than the head and thorax united; a little more than twice as long as its greatest width; segment 3 two-thirds longer than 2, as long as 1 and 2 united, a little longer than 4-6 united; 6 on either side with a short sharp spine; 3 densely finely irregularly striate and with shallow indefinite punctures between the striæ; 4 and 5 with close fine impressed reticulation, 4 with also very fine striæ and traces of shallow punctures.

*Male*.—Length, 2.50 mm.

Antennæ wholly black, as in *australica*.

*Habitat*.—North Queensland: Cairns district, one female (type) in December; Herbert River, one pair in March.

*Type*.—South Australian Museum, I. 1365.

Readily distinguished by the dark femora and tegulæ, pronounced median groove of the scutum, long tarsi, and the tooth of the metanotum not being bidentate.

This species appears identical with a Philippine Island species which is probably *H. pacifica* Ashmead. I have before me three females from that locality; one was received from the U.S. National Museum and is labelled *Hoploteleia pacifica* Ash., as identified by Mr. A. B. Gahan.

The remaining two were received from Professor C. F. Baker, of Los Banos, Philippine Islands, and are labelled *Hoploteleia philippinensis* Kieffer, possibly by Kieffer himself; they represent two species, one of which, to judge from Kieffer's description, is correctly determined; the other specimen, which represents the same species as the National Museum example, agrees with the description of *H. unidens* Kieffer. Thus it would appear that both *unidens* Kieff. and *atricornis* Dodd are synonyms of *pacifica* Ashm. However, Ashmead's description of *pacifica* does not agree with the National Museum example, and, although Mr. Gahan's determination is probably correct, the doubt that exists justifies the retention of the name *atricornis* for the time being.

*HOPLOTELEIA PERSIMILIS* DODD.

Royal Soc. of Queensland, vol. 26, p. 96 (1914).

*H. aureiscapus* Dodd, *ibidem*, p. 96.

*Female*.—Length, 2.60–3.00 mm.

Black, tegulæ red; legs golden-yellow, the coxæ reddish yellow; antennal scape reddish-yellow, the pedicel and funicle joints suffused with brown, the club black.

Head from dorsal aspect not more than twice as wide as long; from lateral aspect the vertex sloping gently to the occipital margin; vertex and upper frons with fine impressed reticulation and shallow depressions indicating large punctures; posteriorly the vertex is coarsely reticulate or rugose-punctate with a longitudinal tendency; lateral ocelli distant from the anterior ocellus by no more than  $1\frac{1}{2}$  times their own diameter and connected with it by one or two oblique striæ; a short carina connects the anterior ocellus with the frontal depression which is sharply convex above; frons on either side of the depression reticulate-punctate, but smooth ventrally; cheeks coarsely reticulate-punctate and with fine impressed reticulation, and toward the mouth with several strong irregular striæ. Antennæ as in *australica*. Scutum with fine close impressed reticulation and shallow wrinkles, the median groove represented by a complete row of confluent punctures, and there are a few punctures on either side against the posterior margin; scutellum strongly confluent or reticulate-punctate; posterior margin of metanotal process concave, so that the two carinæ project in the form of teeth; propodeum foveate medially, densely punctate and pubescent laterally, its posterior margin uniformly gently concave. Posterior tarsi one-half longer than their tibiæ. Forewings lightly stained; marginal vein one-third as long as the long stigmal, the postmarginal three times as long as the stigmal. Abdomen slightly longer than the head and thorax united, almost three times as long as its greatest width; segment 3 two-thirds longer than 2, as long as 1 and 2 or 4-6 united; spines on either side of 6 short and acute; sculpture as in *australica*, except that the punctures between the striæ on segment 3 are more distinct; pubescence as in *australica*.

*Male*.—Coxæ dark, at least at base; spines at apex of abdomen long and slender. Antennal scape red, dusky toward apex, the pedicel dusky, the flagellum black; segmentation as in *australica*.

*Habitat*.—North Queensland: Herbert River (type), Innisfail, Cairns; four females, two males.

*Type*.—South Australian Museum, I. 11009.

The sexes were originally described as distinct species. At once differing from *australica* in the long posterior tarsi. The median punctures of the scutum are more in the form of a groove than in *australica*, the apical spines of the abdomen are shorter in the female, the concave posterior margin of the metanotal process gives a more apparent bidentate effect, and segment 3 of the abdomen is relatively longer.

### *HOPLOTELEIA GRACILICORNIS* DODD.

Royal Soc. of Queensland, vol. 26, p. 97 (1914).

*Female*.—Length, 2.75–3.25 mm.

Black, the tegulæ red; legs, including the coxæ, bright reddish-yellow; antennæ wholly black.

Head from dorsal aspect twice as wide as long, the vertex hardly sloping to the occiput; behind the ocelli the vertex is very strongly reticulate- or rugose-punctate with a longitudinal tendency; between the ocelli are three or four striæ or rugæ; upper frons shallowly reticulate-punctate medially, with fine impressed reticulation laterally; cheeks coarsely reticulate-punctate and with fine reticulation also; antennal impression narrowly rounded above. Antennæ as in *australica*. Thorax scarcely as wide as the head, one-fourth longer than its greatest width; scutum with fine close impressed reticulation and shallow wrinkles or depressions suggesting punctures, the median lobe with large confluent punctures toward posterior margin, along the median line, and against the anterior margin; scutellum with large confluent punctures; metanotal plate faintly bidentate, the carina forming the teeth close together; posterior margin of propodeum faintly concave with a slight projection at the junction of the lateral carinæ. Forewings reaching apex of abdomen; subhyaline; venation bright yellow; marginal vein one-fourth as long as the stigmal, the postmarginal  $2\frac{1}{2}$  times as long as the stigmal. Posterior tarsi scarcely longer than their tibiæ; posterior femora not much swollen. Abdomen no longer than the head and thorax united, hardly more than twice as long as its greatest width; segment 3 one-third longer than 2, as long as 4-6 united, somewhat shorter than 1 and 2 united; 6 before apex faintly truncate, without a spine or tooth on either side; 2 strongly irregularly striate, sculptured between the striæ but without definite punctures; 3 with large shallow punctures and fine indefinite striæ; 4 with similar but finer sculpture; 5 with fine impressed reticulation and numerous shallow punctures; 6 with fine reticulation.

*Male*.—Unknown.

*Habitat*.—New South Wales: Glen Innes, A. M. Lea (type). Queensland: Mount Tambourine and Cairns, A. P. Dodd. Three females.

*Type*.—In the collection of the Government Entomologist of New South Wales.

Differs from *sculpturata* in the less swollen hind femora, colour of antennæ, absence of spines at apex of abdomen, and less noticeable punctuation of segment 2 of abdomen; from *australica* in the colour of the coxæ, absence of spines at apex of abdomen, more definite punctuation and less definite striation of segment 3 of abdomen.

### HOPLOTELEIA SCULPTURATA DODD.

Royal Soc. of Queensland, vol. 26, p. 95 (1914).

*Female*.—Length, 3.75 mm.

Black, the tegulæ red; legs, including the coxæ, bright reddish-yellow; first three funicle joints clear reddish-yellow, the scape and pedicel dusky-red or almost black.

Head from dorsal aspect about  $2\frac{1}{2}$  times as wide as long, the vertex flat, not sloping to the occipital margin; vertex behind the line of the lateral ocelli very strongly reticulate- or rugose-punctate with a longitudinal tendency; upper frons with shallow depressions and close fine impressed reticulation; between the ocelli and on the upper frons are a few irregular striæ or rugæ; cheeks coarsely reticulate-punctate except for a small smooth area ventrally; frontal impression very sharply rounded above, smooth, without definite striæ. Antennæ as in *australica*. Thorax about one-fourth longer than its greatest width, scarcely as wide as the head; scutum with fine close impressed reticulation and shallow wrinkles or depressions suggesting punctures, the median lobe broadly confluent punctate posteriorly, this sculpture continued forward narrowly for its entire length but not forming a groove; against the anterior margin are close punctures; scutellum strongly reticulate-punctate; metanotal plate large, obtuse and faintly bidentate posteriorly, the two carinæ or teeth close together; posterior margin of propodeum almost straight, with a short blunt projection at the junction of the lateral carinæ. Posterior tarsi slightly longer than their tibiæ (7:6); posterior femora considerably swollen. Forewings reaching apex of abdomen; marginal vein one-fourth as long as the long stigmal, the postmarginal  $2\frac{1}{2}$  times as long as the stigmal. Abdomen no longer than the head and thorax united, twice as long as its greatest width; segment 3 two-thirds longer than 2, a little shorter than 1 and 2 united, as long as 4-6 united; 6 with an apical truncate carina armed at either side with a short spine or tooth; 2 strongly sparsely striate, medially with large shallow punctures between the striæ, laterally the punctures are coarse and distinct; 3 with large shallow confluent punctures and with



fine irregular indefinite striæ; 4 with fine punctures, the striæ hardly discernible; 5 with fine impressed reticulation and numerous punctures; 6 rugose-punctate.

*Male*.—Unknown.

*Habitat*.—New South Wales: Tweed River, one female (type) in May, A. P. Dodd. North Queensland: Dunk Island, one female in August, H. Hacker.

*Type*.—South Australian Museum, I. 11007.

The punctuation of segments 2 and 3 of the abdomen is much stronger than in *australica*. The posterior femora are more noticeably swollen than in any of the known Australian species.

### *HOPLOTELEIA ELEVATA* NEW SPECIES.

*Female*.—Length, 3.20 mm.

Black, the tegulæ red; legs, including the coxæ, bright reddish-yellow; antennal scape red, the pedicel dusky, the funicle joints faintly suffused with red.

Head from dorsal aspect not more than twice as wide as long, the vertex not descending to the occiput, slightly wider than the thorax; occipital margin not uniformly concave, broadly straight or truncate medially and angled laterally; highly polished; behind the ocelli to the occiput are strong sparse irregular longitudinal rugæ or striæ, between which are large shallow indefinite punctures; between the ocelli is a very large triangular puncture; upper frons with shallow indefinite reticulate punctures; on either side of the anterior ocellus and narrowly behind the lateral ocelli is fine impressed reticulation; cheeks with longitudinal rows of confluent punctures; frontal impression acutely rounded above. Antennæ slender; funicle 1 one-half longer than the pedicel, three times as long as its greatest width; 3 very distinctly longer than wide; 4 as long as wide; club 1 somewhat wider than long, 2 a little longer than wide, 3-5 each as wide as long. Thorax from dorsal aspect one-third longer than its greatest width, from lateral aspect one-half longer than high; median lobe of scutum with a complete median carina, on either side strongly transversely rugose or irregularly striate, the lateral lobes shallowly reticulate-punctate; narrowly on either side of the parapsidal furrows is fine impressed reticulation; scutellum coarsely reticulate-punctate; posterior margin of metanotal plate concave and bidentate, the median carinæ well apart and a little divergent; posterior margin of propodeum definitely concave, the blunt projections well marked. Posterior femora somewhat swollen; posterior tarsi slightly longer than their tibiæ. Forewings slightly infusate; marginal vein one-third as long as the stigmal, the postmarginal slightly more than twice as long as the stigmal. Abdomen no longer than the head and thorax united,  $2\frac{1}{2}$  times as long as its greatest width; segment 3 two-thirds longer than 2, almost as long as 1 and 2 united; 6 on either side with a stout spine; 2 strongly striate, between the striæ almost

smooth; 3 finely densely irregularly striate and densely punctate, the punctures of moderate size or very small; 4 with fine striæ and dense fine punctures, the median line and posterior margin with fine reticulation; 5 with fine impressed reticulation and scattered punctures; 6 with fine reticulation.

*Male*.—Antennæ black, the scape red, the pedicel dusky; funicle 2 as long as 1 or 3. Segments 4-6 of abdomen with fine reticulation and scattered punctures which are more numerous on 4; apical spines longer than in the female.

*Habitat*.—North Queensland: Cairns and Innisfail, one female, two males, in November and December, A. P. Dodd.

*Holotype* and *Allotype* in the Queensland Museum.

*Paratype* in the author's collection.

At once distinguished by the median carina and transverse rugæ of the median lobe of the mesoscutum, and the shape of the occipital margin.

#### *HOPLOTELEIA PULCHRICORNIS* DODD.

Royal Soc. of S. Australia, vol. 37, p. 134 (1913).

*H. acuminata* Dodd, *ibidem*, p. 177.

*Female*.—Length, 3.25 mm.

Black; tegulæ red; legs, including the coxæ, and first six antennal joints bright golden- or reddish-yellow.

Head from dorsal aspect a little more than  $2\frac{1}{2}$  times as wide as long, no wider than the thorax; vertex sloping rather sharply to the occipital margin; vertex behind the ocelli strongly reticulate-punctate, toward the occiput longitudinally rugose-punctate; between the ocelli are several connecting striæ; upper frons medially shallowly reticulate-punctate, on either side with fine impressed reticulation; cheeks very narrow above, the ventral half for the most part smooth with a few punctures and obscure grooves; frontal impression rather broadly rounded above, without definite cross-striæ, but with oblique striæ laterally. Antennæ as in *australiana*. Thorax one-fifth longer than its greatest width; scutum with shallow depressions or obscure punctures and close fine impressed reticulation; against the posterior margin of the median lobe with large confluent punctures, with smaller less distinct punctures against its anterior margin, and obscure punctures along the median line; parapsidal furrows separated posteriorly by one-half their length; scutellum strongly confluent punctate; metanotal process bluntly bidentate, the teeth well-separated, the posterior margin concave, the median carinæ diverging from base; posterior margin of propodeum slightly concave, faintly projecting at the junction of the lateral carinæ; metapleura strongly striate in centre. Posterior femora not much swollen; posterior tarsi no longer than their tibiæ. Forewings subhyaline or faintly yellowish; venation bright yellow; marginal vein

one-fourth as long as the long stigmal vein, the postmarginal  $2\frac{1}{2}$  times as long as the stigmal. Abdomen a little (about one-sixth) longer than the head and thorax united, two and one-third times as long as its greatest width; segment 3 about one-fourth longer than 2, three-fourths as long as 1 and 2 united; 6 as long as 5, without a truncate plate or spines, pointed at apex; 2 with rather distinct punctures between the striæ, the punctures very distinct laterally; 3 confluent punctate and with fine indistinct or indefinite striæ; 4 with similar finer sculpture but medially with fine impressed reticulation and scattered punctures; 5 with fine impressed reticulation and numerous punctures; 6 with fine reticulation and fine indefinite punctures.

*Male*.—Antennal scape yellow, the pedicel brownish-yellow, the basal flagellar joints suffused with yellow.

*Habitat*.—Queensland: Cairns district (type), Bowen; Biggenden, Blackall Range, Brisbane, Mount Tambourine; a small series.

*Type*.—South Australian Museum, I. 1366.

In this species the head is more transverse than usual and descends noticeably to the occiput. The absence of apical teeth on the abdomen is found in *gracilicornis* and *fæderata*; in the former the antennæ are wholly black, while the distinguishing characters of *fæderata* are given later.

The sexes were originally described as distinct species. This species is parasitic on the eggs of a large *Tettigoniid* (*Orthoptera*).

#### *HOPLOTELEIA FÆDERATA* NEW SPECIES.

*Female*.—Length, 3–3.50 mm.

Black; tegulæ red; legs, including the coxæ, bright reddish-yellow; antennal scape and first three funicle joints bright reddish-yellow, the pedicel fuscous.

Head from dorsal aspect a little wider than the thorax, a little more than twice as wide as long, the vertex not descending to the occiput; vertex strongly reticulate-punctate without a longitudinal tendency; behind each lateral ocellus and laterally on the upper frons with close fine impressed reticulation; between the ocelli are two or three connecting striæ; upper frons reticulate-punctate; frontal impression very broadly rounded above, more or less transversely striate; cheeks very strongly reticulate- or rugose-punctate. Antennæ normal. Thorax a little longer than its greatest width; scutum with fine close impressed reticulation and shallow depressions or obscure punctures, with large confluent punctures posteriorly on the median lobe, and smaller punctures against the anterior margin of the median lobe; scutellum with large confluent punctures; metanotal plate concave and bluntly bidentate at apex, the median carinæ diverging from base; posterior margin of propodeum faintly concave, with a blunt projection at the lateral carinæ. Legs spiny; posterior femora somewhat swollen; posterior tarsi no longer

than their tibiæ or a little shorter. Forewings reaching apex of abdomen; subhyaline or faintly yellowish; marginal vein one-third as long as the stigmal, the postmarginal three times as long as the stigmal. Abdomen a little (about one-sixth) longer than the head and thorax united, two and one-third times as long as its greatest width; segment 3 plainly shorter than 1 and 2 united, one-fourth longer than 2; 6 about as long as 5, acuminate, without apical teeth; 2 very strongly striate, hardly sculptured between the striæ medially, with obscure punctures laterally; 3 quite strongly striate, with shallow punctures between; 4 and 5 with finer striæ, which are still dense and distinct, the punctures more definite on 5, the median line narrowly smooth except for a few punctures; 6 with numerous punctures and fine impressed reticulation.

*Male*.—Antennal scape red, the basal funicle joints and the pedicel a little suffused with red. Abdomen not much narrower than the thorax (5:4),  $2\frac{1}{2}$  times as long as its greatest width, the punctuation of segments 3-5 more distinct than in the female; apical segment gently concave at apex and with a small obtuse tooth on either side.

*Habitat*.—Queensland: Chinchilla, twelve females, eleven males, January-March, A. P. Dodd; Westwood, one pair in March, A. P. Dodd.

*Holotype* and *Allotype* in the Queensland Museum.

*Paratypes* in the author's collection.

Very closely related to *pulchricornis*, from which it may be distinguished by the densely sculptured cheeks, very definite striæ of segments 3-5 of abdomen, more spiny legs, and somewhat swollen hind femora. In *sculpturata* the scape is darker than the funicle joints, the metanotum is less evidently bidentate, the female abdomen is bispinose at apex, and the hind femora are much swollen. In *amica* the coxæ are black, the shallow punctures of the mesoseutum are hardly discernible, the posterior margin of the propodeum is more concave with the projections more definite, the female abdomen is bispinose at apex, and the male abdomen is more slender.

#### *HOPLOTELEIA AMICA* NEW SPECIES.

*Female*.—Length, 3.25-3.50 mm.

Black, the tegulæ red; legs bright reddish-yellow, the coxæ black, the tarsi dusky; first five antennal joints reddish-yellow, the pedicel sometimes dusky.

Head from dorsal aspect a little more than twice as wide as long, a little yet distinctly wider than the thorax; vertex hardly descending to the occiput; vertex and upper frons coarsely reticulate-punctate without a longitudinal tendency; between the ocelli are about two connecting striæ; behind the lateral ocelli and on either side of the upper frons is fine impressed reticulation; frontal impression very broadly rounded above, shining, without definite striæ; cheeks coarsely reticulate-punctate. Antennæ normal. Thorax a little longer than its



greatest width; scutum with fine close impressed reticulation and finely wrinkled, the median lobe with large confluent punctures posteriorly and smaller confluent punctures against the anterior margin; scutellum coarsely confluent punctate; metanotal plate deeply concave and plainly bidentate posteriorly, the median carinæ wide apart and parallel; posterior margin of the propodeum distinctly concave medially, with a strong blunt projection at the junction of the lateral carinæ. Posterior femora a little swollen; posterior tarsi slightly longer (6:5) than their tibiæ. Forewings reaching apex of abdomen; subhyaline; venation fuscous; marginal vein one-third as long as the stigmal, the postmarginal almost three times as long as the stigmal. Abdomen no longer than the head and thorax united, slightly more than twice (20:9) as long as its greatest width; segment 3 two-thirds longer than 2, almost as long as 1 and 2 united; 6 before the apex truncate and armed on either side with a short sharp spine; 2 strongly striate, hardly sculptured between the striæ except laterally; 3 densely rather finely irregularly striate and with shallow obscure punctures between; 4 with similar finer sculpture, the punctures more distinct on 5; 6 reticulate-punctate.

*Male*.—Antennæ black, the scape red, the pedicel suffused with red. Abdomen distinctly narrower (2:3) than the thorax, two and two-thirds as long as its greatest width; apical segment broadly truncate and with a short tooth on either side.

*Habitat*.—South Queensland: Chinchilla, 14 females, 1 male January-March, A. P. Dodd; Goondiwindi, three females, two males in January, A.P.D. New South Wales: Warialda, one female in January.

*Holotype* and *Allotype* in the Queensland Museum.

*Paratypes* in the author's collection.

The shallow depressions or obscure punctures of the scutum are much less evident than in *sculpturata*, *pulchricornis*, and *fæderata*, while the projections of the posterior margin of the propodeum are more pronounced. Differs from the female of *fæderata* in the smooth frontal impression, black coxæ, and the presence of the short apical spines on the abdomen; from *sculpturata* in the normal hind femora, black coxæ, and broadly rounded frontal impression; from *pulchricornis* in the black coxæ, apical spines of abdomen, and densely sculptured cheeks.

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